HUDSON COUNTY

Cancer Control and Prevention Capacity and Needs Assessment Report Summary

December 2004

Funds and Support Provided By

New Jersey Department of Health and Senior Services
Center for Cancer Initiatives
The Office of Cancer Control and Prevention

Notices:

Medicine is an ever-changing science. As new research and data broaden our knowledge, conclusions may change. The authors and reviewers have endeavored to check the sources of information and to utilize sources believed to be the most reliable in an effort to provide information that is as complete as possible at the time of submission and generally in accord with appropriate standards. However, in view of the possibility of human error or changes in medical science, this work cannot be warranted as being complete and accurate in every respect. Readers are encouraged to confirm the information contained herein with other sources. Information concerning some of the sources of data, rationale for its utilization, acknowledgements of specific parties contributing to these efforts, as well as links to cancer-related information may be found at www.umdnj.edu/evalcweb/.

This county-level Report Summary summarizes the larger county report, which is a baseline evaluation of this county, performed as part of the Capacity and Needs Assessment initiative of the New Jersey Comprehensive Cancer Control Plan (www.state.nj.us/health/ccp/ccc_plan.htm), under the direction of the New Jersey Department of Health and Senior Services (NJDHSS) Office of Cancer Control and Prevention (OCCP) (www.state.nj.us/health/ccp/), the University of Medicine and Dentistry of New Jersey (UMDNJ) (www.umdnj.edu/evalcweb/), and the Evaluation Committee of the Governor's Task Force on Cancer Prevention, Early Detection and Treatment in New Jersey (Task Force Chair: Arnold Baskies, MD; Evaluation Committee Chair: Stanley H. Weiss, MD).

Comments may be sent to the first author of the Report Summary, William Bullock, at bbullock20@aol.com. ***Copies of any comments should also be sent to both*:** Ms. Knight peg.knight@doh.state.nj.us and Dr. Weiss weiss@umdnj.edu.

Suggested citation for this Report Summary:
Bullock W, Bock R, Akinosho P. Hudson County Cancer Capacity and Needs Assessment Report Summary, December 2004. In: *New Jersey Statewide County-based Cancer Capacity and Needs Assessment Initiative, 2003-2004 Report Summaries*, Editors: Stanley H. Weiss (UMDNJ) and Margaret L. Knight (NJDHSS).

Prepared by:

William Bullock, bbullock20@aol.com
Roger P. Bock
Patience Akinosho

On behalf of:

Hoboken Family Planning, Inc.
Jersey City Family Health Center

Under the guidance of:

Stanley H. Weiss, MD, University of Medicine and Dentistry of New Jersey-New Jersey Medical School (UMDNJ-NJMS) and School of Public Health (UMDNJ-SPH) (Principal Investigator)
Marcia M. Sass, BSRN, MSN, ScD, UMDNJ-SPH
Susan L. Collini, MPH, UMDNJ-NJMS
Daniel M. Rosenblum, PhD, UMDNJ-NJMS
Judith B. Klotz, DrPH, UMDNJ-SPH

With the assistance of:

- The UMDNJ Clinical Research Group – David L. Hom, MS, Loretta L. Morales, MPH, Benita Negron
- The Battelle Centers for Public Health Research and Evaluation – Joanne P. Abed, PhD, Jennifer Brustrom, PhD
- The New Jersey Department of Health and Senior Services, the New Jersey Cancer Education and Early Detection Program, the New Jersey State Cancer Registry, and the Center for Health Statistics.

Reviewed and edited by:

Jung Y. Kim, MPH, UMDNJ-NJMS
Daniel M. Rosenblum, PhD, UMDNJ-NJMS
Stanley H. Weiss, MD, UMDNJ-NJMS and UMDNJ-SPH

List of Contributors:

Greg Cable, PhD	Princeton Health Partners
Abraham Kasbo, MPH	Princeton Health Partners
Robert Schermer, MUP	Strategic Innovation Management
Luz Villamil-Bayona	Jersey City Family Health Center
Manuel Iglesias	Hoboken Family Planning
Richard Ward	Hoboken Family Planning

Table of Contents Page

Hudson County
Cancer Capacity and Needs Assessment Report Summary

Introduction

The Office of Cancer Control and Prevention (OCCP) of the New Jersey Department of Health and Senior Services (NJDHSS), in conjunction with the mandate from the Governor's Task Force on Cancer Prevention, Early Detection and Treatment in New Jersey (Task Force), is developing comprehensive capacity and needs assessment reports concerning cancer, individualized for each county in the state. This Report Summary highlights key findings in the Hudson County report.

The Task Force released New Jersey's Comprehensive Cancer Control Plan (NJ-CCCP) in 2002.[1] Each county was commissioned to develop a comprehensive capacity and needs assessment report, as part of the initial implementation steps for the NJ-CCCP. The full Report and this Report Summary were developed under the direction of the University of Medicine and Dentistry of New Jersey (UMDNJ) and the Evaluation Committee of the Task Force, in furtherance of the NJ-CCCP (which can be found at: http://www.state.nj.us/health/ccp/ccc_plan.htm). This particular assessment was funded by the OCCP through the following New Jersey Cancer Education and Early Detection (NJCEED) county agencies in Hudson County: Hoboken Family Planning and Jersey City Family Health Center.

The purpose of the capacity and needs assessment reports is to identify the major cancer issues affecting each county and the county's available resources, or lack thereof, for cancer prevention, screening, and treatment, and to propose recommendations for improvement. The Hudson County Cancer Capacity and Needs Assessment Report (C/NA)[2] analyzes the population demographics and the cancer incidence and mortality rates and distribution of stage at diagnosis for the seven priority cancers of the NJ-CCCP (breast, cervical, colorectal, lung, oral, melanoma, and prostate), as well as current resources available, in the county. These data guided the development of evidence-based recommendations and interventions to address cancer control priorities at local and state levels.

Section 1 – County Demographic Profile

Hudson County is the smallest county (46.7 square miles) in New Jersey. In 2000, it had a total population of 608,975, making it, by far, the most densely populated county in the state, with 13,044 people per square mile. Essex County is next, with less than one-half this density – 6,285 residents per square mile. New Jersey is the most densely populated state in the nation, with an average of 1,134 people per square mile.[3] Hudson County is, therefore, the most densely populated county in the most densely populated state in the country. In fact, Hudson County is

the fourth most densely populated county in the United States, and it is estimated that a million people pass through Hudson County daily.[4]

According to the U.S. Census, in each of the four decades from 1950 to 1990, Hudson County's total population decreased. But remarkably, in the 10-year period from 1990 to 2000, this 40-year downward spiral reversed itself, as the county's population rose by 55,876 residents, from 553,099 in 1990 to 608,975 in 2000, a 10% increase.[a,4,5,6] During the 1990s, the state's population grew by 8.6%. Interestingly, Hudson County is the *only* urban county in New Jersey for which the population growth percentage exceeded that of the state in the 1990s.[7]

All 12 Hudson County municipalities experienced population growth from 1990 to 2000; the six with the greatest numerical increases – Jersey City, North Bergen, Union City, West New York, Kearney, and Hoboken – accounted for 87% of the county's total growth. In addition, the 2000 Census counted 240,055 people living in Jersey City. Jersey City gained 6,005 residents in the 1980s and another 11,518 people in the 1990s. If this trend continues, Jersey City may displace Newark as the state's largest municipality.[6,7]

Despite this impressive 10% growth in the county's population in the 1990s, its population was undercounted in the 2000 Census. In July of 2001, after a lengthy dispute with county officials over the final 2000 figure, the Census Monitoring Board acknowledged that the 2000 Census had missed 2.2% of Hudson County's population, resulting in an undercount of 13,055 people.[8,9] County officials continue to say the undercount was much larger than 13,055, and this undercount adversely affected the county because every county resident undercounted in the 2000 Census represents $10,674 in lost federal and state aid.[9] The county's population also includes a large number of undocumented aliens who are not reflected in the county's 608,975 total population count for 2000. For obvious reasons, it is difficult to estimate the actual number of undocumented individuals living in the county.[10]

The county's population also experienced dramatic shifts as it grew by 10% from 1990 to 2000. The Hispanic population[b] increased by nearly 60,000 residents to 242,123 and, as of 2000, represented 40% of the county's total population, the highest percentage Hispanic population of any county in New Jersey. The county's white population declined in the 1990s by over 40,000 residents, but remained the largest single race group in 2000 (56% of the county's population). The size of the county's black population rose slightly in the 1990s, but its percentage of the total population decreased slightly from 14% in 1990 to 13% in 2000. The county's Asian and Pacific-Islander population increased by over 20,000 people between 1990 and 2000, increasing from 6.6% in 1990 to 9.5% in 2000. Those who classified themselves as 'some other race' or 'two or more races' soared to over 120,000 (21% of the county's total 2000 population).[3]

According to the 2000 Census, the median age of Hudson County's population was 33.6, the youngest of New Jersey's 21 counties.[11] At the time of the 2000 Census, 25% (152,724 persons) of the county's total population of 608,975 was aged 50 or older; 28% of the county's total female population (or 87,002 women) was aged 50 or older; and 22% of the county's total male population (or 65,722 men) was aged 50 or older.

[a] In general, percentages in this report are rounded to two digits.
[b] Hispanics and non-Hispanics may be of any race. Racial categories include both Hispanics and non-Hispanics.

The economic and immigrant forces of the new millennium have created a county population that ranks high in poverty[c], low in income, and high in the number of under- and uninsured, compared to the rest of New Jersey.[12] For example, Hudson County's population in 1999[d] had the second lowest average income per taxpayer, behind only Cumberland County.[13] Data for 1999 indicate that 15.5% of the county's residents whose poverty status could be determined were living in poverty, nearly double the state rate of 8.5%. Hudson County's poverty rate was only a tenth of a percent lower than that of Essex County (15.6%), which has the highest poverty rate among all counties in New Jersey. Among adolescents and children (under 18 years), 22.0% (30,290 people) were living in poverty, and 15.7% of residents aged 65 and over (10,597 people) were living in poverty. The poverty rates for these three groups were the highest among New Jersey's 21 counties and double the state rates for the same age groups.[3]

A substantially higher percentage of Hudson County's population (35% of the total population or 213,141 people) is poor (with income below 200% of the federal poverty level) compared to the state (20%).[14] It is estimated that a combined total of 34% of the county residents are either uninsured (21%) or underinsured (13% covered by Medicaid).[14] Moreover, according to a recent report from the New Jersey Center for Health Statistics, based on a March 2002 survey, the current uninsured rate among Hispanics is 33%, up nearly 6% from the figure derived from the 2001 survey (28%).[15] Because the population of Hudson County is nearly 40% Hispanic, this material increase in the number of uninsured among Hispanics implies that the situation in Hudson County may be worsening.

Of the county's population 25 years and over, 29% has less than a high school diploma, higher than the overall rate for the state (18%).[2] In 2001, it was estimated that 34% of the county's population aged 16 and over have a literacy level of 1, meaning that one-third of the adults in Hudson County can read a little but not well enough to fill out an application, read a food label, or read a simple story to a child.[16] Also, 16% of the county's population speaks English "not well" or "not at all"[2] and 56% of the county's population speaks a language other than English at home.

Summary of County Demographics

- Almost 16% of county residents were living in poverty, nearly double the state rate (8.5%).[2]
- A much higher percentage of the county population (35%) had incomes below 200% of the federal poverty level compared to the state (20%).[14]
- Almost 30% of county residents had less than a high school diploma (18% statewide).[2]
- It is estimated that one-third of all adults in Hudson County can read a little but not well enough to fill out an application, read a food label, or read a simple story to a child.[16]
- One-third of Hudson County residents are estimated to be either uninsured or underinsured.[14]
- Approximately 80,000 Hispanic residents (one-third of the county's Hispanic population) are estimated to be uninsured.[14]

[c] This term is defined in the glossary, which is available at: http://www.umdnj.edu/evalcweb/ccr/
[d] All figures for poverty, income, and employment are from the 2000 Census, but refer to the year 1999.

- The county has a large legal immigrant population and a substantial number of undocumented individuals living in the county.

As the following sections will show, the demographic profile of Hudson County summarized above, combined with the structure of the healthcare system (e.g., perceived lack of equitable Medicaid reimbursement to all providers; lack of sufficient funding to cover cancer screening for the uninsured and underinsured), contributes to suboptimal rates of early detection and treatment of cancer, potentially resulting in higher mortality rates.

Section 2 – Overview of Overarching Issues

Detailed information regarding cancer screening, education, advocacy, treatment, palliation, and other activities has been collected to identify resources currently available in Hudson County. This information was included in the statewide Cancer Resource Database of New Jersey (CRDNJ).[17]

Lack of Access to Oncology Services

According to key informants[e] and other sources,[18,19] the principal cancer problem facing Hudson County is lack of access to oncology services for the underinsured, the uninsured, and undocumented aliens. These informants expressed a high degree of frustration with the health care delivery system in Hudson County because of difficulties they encounter in identifying oncology services for the underinsured, specifically Medicaid-eligible individuals. Informants also cited variability among Medicaid Health Maintenance Organizations (HMOs) in the oncology services they cover. It is even more difficult to locate oncology services for uninsured individuals with insufficient means to pay for these services (the working poor), and more difficult still – nearly impossible according to some informants – to secure these services for undocumented aliens. Problems with lack of access to medical care in Hudson County prompted one nurse practitioner performing cancer screening services for the Hudson County NJCEED cancer screening program to ask, "Once cancer is diagnosed, where do you send them?" Physician informants in Hudson County responsible for diagnosing cancer and arranging care for the medically underserved[f] confirmed that Hudson County has a very serious problem when it

[e] In July and August of 2003 and in March of 2004, County Evaluators gathered and analyzed quantitative and qualitative information provided by fifteen key informants as well as from the participants at three focus group meetings held in July 2003. The key informants consisted of a surgeon, an oncologist, a gynecology oncologist, a radiology oncologist, the nurse administrator of a hospital based oncology clinic, two dentists, the medical directors of two large ambulatory health centers, the director of a large palliation and hospice program, two hospital executives, the nurse administrator of a municipal health program, and a high school administrator. The Focus Group participants included healthcare administrators and practitioners, community group representatives, and cancer survivors. These key informants and focus group participants represented a broad spectrum of the cancer stakeholders in Hudson County and provided this and other information contained in this report concerning the diagnosis and treatment of the cancer in Hudson County.

[f] According to the National Cancer Institute, the term medically underserved refers to individuals who lack access to primary care either because they are socioeconomically disadvantaged and may or may not live in areas with high poverty rates or because they reside in rural areas. The term also refers to individuals that reside in geographic areas where the Index of Medical Underservice (IMU) is 62 or less. The IMU is a weighted score derived from four

comes to diagnosing and treating cancer among its residents who cannot pay for the oncology services they need. According to these informants, uninsured and underinsured individuals cannot access cancer specialists because these specialists do not participate in programs that serve this population, given the low reimbursement rates. Informants went on to say that the medically underserved in Hudson County with a cancer diagnosis are "at the mercy of a fragmented system" and thus cannot obtain care early when it would be most beneficial; consequently, these individuals have poorer outcomes than individuals with health insurance. Arranging follow-up care for uninsured and underinsured individuals with breast, cervical, lung (both males and females), prostate, and gastrointestinal (GI) cancer (males only) is the most problematic according to this group of physicians.

According to the medical director of a large ambulatory health center, 60% of Hudson County's residents lack access to quality cancer services because they are either uninsured or underinsured. Information from the Atlantic Region office of the National Cancer Institute's (NCI's) Cancer Information Service (CIS) substantiates this claim. In June 2003, the NCI's CIS compiled the *Hudson County Consumer Health Profiles*, a set of county-specific maps and data that identify the medically underserved clusters in the county.[g,19] According to these data, 424,803 of the county's 608,975 total residents (4 out of every 6 residents) are medically underserved.[h,19]

Key informants responded in the negative when asked whether lack of access to oncology services among the uninsured and the underinsured was a function of a shortage of services.

There are eight hospitals located in Hudson County offering varying degrees of cancer treatment for those who seek it locally, including:

- *Jersey City Medical Center.* This is the county's major teaching hospital, and as such receives countywide referrals. This medical center serves the region as the Children's Hospital of Hudson County, a regional Level II Trauma Center, a teaching cancer hospital (including the Liberty Cancer Institute). It has a breast cancer center.
- *Christ Hospital.* This facility has a community hospital cancer program that is accredited by the American College of Surgeons Commission on Cancer, as well as a comprehensive radiation oncology program.

---

variables: the ratio of primary medical care physicians per 1,000 population, infant mortality rate, percentage of population below the federal poverty level, and the percentage of the population aged 65 years and older.

[g] The data categorize the U.S. population into 62 groups based upon characteristics such as geography, demographics, lifestyle, and socioeconomic status. Within these 62 groups, 30 are classified as medically underserved. The population of medically underserved individuals in Hudson County includes 165,864 females aged 18 and over and 153,720 males aged 18 and over.[19]

[h] Individuals who lack access to oncology services because they are uninsured have a higher risk of dying from cancer, according to a landmark study, "Care without Coverage, Too Little Too Late," published in May 2002, by the National Academy of Sciences' Institute of Medicine.[18] This study reached the following conclusions about the uninsured: 1) Quality and length of life are distinctly different for insured and uninsured populations. Uninsured adults are less likely than insured adults to receive recommended health screenings (e.g., mammograms, clinical breast exams, Pap tests, colorectal screenings); 2) People without health insurance go without cancer screening tests, delaying diagnosis and leading to premature death; and 3) When cancer is found, it is relatively advanced and more often fatal than in persons with health insurance coverage (e.g., uninsured women have a 30–50% higher risk of dying than women with private insurance, and uninsured people with colon cancer face a 50% higher risk of death).

- *Palisades Hospital.* Among the services at this facility is a breast cancer center.
- *Bayonne Hospital.* This facility has an oncology clinic that provides radiation therapy and chemotherapy on an ambulatory basis, as well as a comprehensive radiation oncology program.
- *St. Mary Hospital, Hoboken.* This facility has an oncology service.

Other hospitals in Hudson County include Greenville Hospital, Meadowlands Medical Center, West Hudson Hospital, and the West Hudson Division of Clara Maass Medical Center.

In addition, key informants said that Hudson County residents with health insurance often seek cancer treatment outside the county. For example, county residents in higher socioeconomic brackets tend to have health insurance that allows them to utilize such premier tertiary hospitals as Memorial Sloan Kettering, Columbia Presbyterian, and Hackensack University, all of which are outside Hudson County. Data from Hudson County hospitals on the cancers treated in the county are largely unavailable, so it is difficult to ascertain whether there are systematic disparities in the range of treatment services and the availability of cutting-edge treatments for those with less flexible insurance coverage. In summary, the combination of a large number of uninsured residents, relatively high percentages of late-stage cancer diagnosis for many groups, and low funding levels for charity care suggests that levels of cancer screening and care are likely not optimal for substantial portions of Hudson County's population.

While informants do not attribute lack of access to oncology services for the county's large medically underserved population to a shortage of oncology service capacity in or near Hudson County, they nevertheless note shortages of cancer subspecialists and other specialists in the county. Shortages may be found in specialties such as gynecology oncologists and ENT (ear, nose, and throat) doctors who will take Medicaid, as well as those who provide GI screenings to Medicaid and low-income self-pay patients. Informants also identified the following non-Medicaid-related shortages: there is only one breast surgeon in the county; no breast reconstruction surgeons; no urological oncologists; nor is children's oncology well covered. Shortages of nurses (not doctors), oncology-trained social workers, and home health workers, as well as difficulties hiring radiation therapists, were additional issues (non-Medicaid-related) cited by informants.

According to key informants, low physician reimbursement is the main impediment to access to care. Lack of access to oncology services for the medically underserved is occurring despite the efforts of the following health programs for the poor: Medicaid, NJCEED, three Federally Qualified Health Centers (FQHCs), and a large publicly funded family planning program.

According to physician informants, lack of reasonable reimbursement for the oncology services required by uninsured, underinsured, and undocumented individuals lies at the root cause of access to care problems. The following examples of low reimbursements were cited: the Medicaid reimbursement for a major oncology surgical case requiring three hours of physician time is $500 and the Medicaid reimbursement rate for a mammogram is less than cost. Furthermore, reimbursements by Medicaid and other HMOs for oncology services are decreasing. Key informants stated, "Medicaid HMO payment rates for cancer diagnosis and treatment are so low that many doctors, especially cancer specialists, will <u>not</u> take [Medicaid

patients]. Therefore, doctors, and in particular cancer specialists, do not participate in the county's Medicaid HMOs, thereby, creating a shortage of cancer doctors for both the uninsured and the underinsured." From the providers' point of view, the cost of medical care is being "dumped" on hospitals and doctors.

A private practice oncologist in Hudson County – who accepts Medicaid and provides services to the uninsured – claimed to be giving away $200,000 to $300,000 in cancer care per year. This physician also observed a significant increase in hardship cases in recent years: 20% of the patients in the practice are uninsured, and 60% of these patients do not speak English. Rising costs exacerbate the situation. This same oncologist cited the following cost escalations:

- Medical malpractice insurance increases of 20 to 50% per year
- Employee health insurance increases of 13% per year
- Substantial rent increases in the real estate market in which the practice is located

Faced with rising costs, low and falling reimbursement rates, and a population of many patients with high-risk behaviors, another radiation oncologist interviewed asked "Why would a doctor come to Hudson County to practice?"

Hospital informants confirmed the assessment of physician informants regarding patient burden and reimbursement levels, noting that:

- Emergency room volumes have increased due to lack of insurance and a lack of education in the community. In effect, emergency rooms in Hudson County hospitals have become the primary care provider for the uninsured.
- Charity care pays hospitals 20 cents on the dollar and does not cover physician services. For example, charity care covers mammography but not the cost of the professional radiology services to interpret a mammogram.
- Hospitals, at times, are in the difficult position of having to turn away people who could pay for services, because some beds are occupied with uninsured individuals unable to pay.

According to informants, hospitals are writing off millions of dollars per year.

In summary, the Hudson County doctors and hospital administrators interviewed for this capacity and needs assessment feel strongly that they are absorbing a disproportionate share of the county's cost of medical care which, by extension, includes the cost of providing cancer care. Delays in payment for Medicaid and charity care reimbursement reported by multiple key informants add to the frustration of healthcare providers.

However, key informants from the Department of Human Services, Division of Medical Assistance disagreed with physician and hospital informants that Medicaid fees are too low and that Medicaid-eligible individuals lack access to cancer services. While they acknowledged that Medicaid fees for the fee-for-service component of New Jersey Medicaid are low, this portion of the program covers only about 20% of Hudson County's Medicaid enrollees. The other 80%, or the majority of the enrollees, are covered by New Jersey's Medicaid Managed Care, under which private HMOs compete for the business, pay reasonable fees to providers, and are required to

maintain adequate provider networks in each county. In addition, one of the medical assistant informants reported that, as of October 25, 2004, the following numbers of providers participated in the Medicaid Program in Hudson County:

Adult Hematologist /Oncologist	24
Pediatric Hematologist/Oncologist	1
Radiation Oncologist	11
ENT	16
Obstetrics/Gynecologist	93
Urologist	31
General Dentists	137
Oral Surgeons	21

Yet, although physician/hospital informants and New Jersey Medicaid informants disagree over the adequacy of Medicaid reimbursements and the number of providers in the Medicaid network for the 13% of the county's population covered by Medicaid,[14] there is little disagreement concerning the county's large number of uninsured and undocumented individuals with cancer diagnoses. The fact is that uninsured and undocumented individuals are not obtaining care early when it is most beneficial and, as a result, they have poorer outcomes.

Limitations of the Current Community-based Cancer Screening Programs

The hospital and physician reimbursement situation is not likely to change because the demand for public healthcare funds is increasing, and funds available to meet this increased demand for services are limited. Therefore, the best alternative for improving the cancer situation in Hudson County in both the near and long term is expansion of community-based cancer screening programs. Currently, uninsured or underinsured Hudson County residents between the ages of 40 and 64 with incomes below 250% of the federal poverty level are eligible for the NJCEED Program. This program offers free breast, cervical, colorectal, and prostate cancer screening to this at-risk population. However, due to funding limitations, breast and cervical cancer screening can be provided to only 18% of the eligible population. Thus, at least 82% of the targeted population is not being screened.

Undoubtedly, some of these individuals are being screened in other public and private healthcare settings. We made multiple attempts to determine how much cancer screening was taking place in these settings and how many people in this targeted population were being screened in public health clinics not funded by the NJCEED Programs. While this attempt was largely unsuccessful due to a lack of response from the providers, we were able to obtain mammography screening capacity data.[i]

[i] The Hudson County hospitals surveyed provided data concerning their mammography screening capacities, but were unable to produce information concerning their prostate, cervical, and colorectal cancer screening capacities despite repeated requests. The county's public health clinics (the three FQHCs and the publicly funded family planning program) all provided breast, cervical, colorectal, and prostate cancer screening capacity data, but none responded to the request to provide an annual count of patients screened for these cancers by age and race/ethnicity.

Cancer Screening Needs

According to the June 2003 *Hudson County Consumer Health Profiles*, the following populations in the county may be in need of cancer screening: [19]

Type of Screening Needed	Gender & Age	Estimate
Prostate Cancer Screening	Males 50 and over	34,528
Colorectal Cancer Screening	Males 50 and over	29,150
Colorectal Cancer Screening	Females 50 and over	38,715
Breast and Cervical Cancer Screening	Females 40 and over	81,045

An estimated 34,500 men aged 50 and over and 81,000 women aged 40 and over – 115,500 county residents or 19% of the county's population – are in medically underserved clusters, in need of age- and risk- appropriate cancer screening outreach. A major expansion of the current Hudson County NJCEED cancer screening program would be required to identify these individuals and convince them to be screened. To accomplish this goal, it is essential that all community-based health organizations (not just the existing NJCEED clinics), especially the FQHCs, the community health centers, family planning clinics, municipal health clinics, hospital clinics, and private physicians located in the county, participate as screening sites and resources.

Need for Smoking Cessation Programs

It is estimated that there are a total of 105,000 adult and adolescent smokers in the county.[2] In addition, the June 2003 *Consumer Health Profiles* identified 153,720 county men and 165,864 county women aged 18 and over who may be in need of smoking cessation programs.[19] According to a key informant, the only method effective in helping people quit smoking is nicotine replacement therapy (NRT). New Jersey offers publicly funded NRT at its QuitCenters. However, the closest QuitCenter is located at Trinitas Hospital in Elizabeth (Union County). In order to make an impact on county smoking rates, Hudson County needs a QuitCenter. Yet funding for the statewide QuitCenter program has recently been cut by two-thirds; thus, it is not likely that a QuitCenter will be funded in Hudson County.

Lack of Cancer Treatment Funds

Key informants cited instances involving charity care cancer patients where very expensive hospital inpatient and intensive care unit (ICU) services had to be utilized, including ventilators and morphine drips, because they, as outpatients, could not afford to buy the pain medicine and antibiotics they required and charity care does not cover these medications for outpatients. According to these informants, charity care patients' inability to pay for these drugs "is costing a fortune in inpatient services" because patients "remain on the floor or in the ICU for a long period of time." According to the informants, charity care will pay for this very expensive inpatient care, but will not fund the much smaller cost of the pain medication and antibiotics that would have prevented these inpatient expenses from occurring. In addition, these informants stated "providing medication, especially pain, NEUPOGEN® injections, and antibiotics, free of

charge on an outpatient basis is the single most effective change that could be made in the existing treatment of underinsured and uninsured cancer patients."[j]

Chemotherapy is another example cited by informants where expensive inpatient hospital services are used to provide cancer treatment when much cheaper outpatient services should be utilized. In some instances, the only way to secure payment for chemotherapy is to admit the patient to a hospital because the payor (e.g., charity care) does not cover this treatment on an outpatient basis. Because this treatment can be provided in an outpatient setting, patients with insurance coverage receive chemotherapy in doctors' offices, whereas patients without insurance coverage are sent to the hospital for this treatment. Significantly higher hospital expenses can be avoided by funding chemotherapy on an outpatient basis. Given the substantial risks of hospital-acquired infection, this suggests the potential for increased morbidity and mortality as well.

In addition, discharging cancer patients, especially those who access healthcare through the emergency room, can be a major problem if the hospital does not have a "safe discharge plan." Charity care does not cover home healthcare; thus, patients who need but do not have any home health assistance, are admitted and then stay in the hospital.[k] To facilitate safe discharges in particular, and continuity of care in general, at least one hospital has developed a comprehensive case management program.

Utilizing outpatient services (in instances where it is as effective and safe as those services delivered on an inpatient basis) for cancer patients would provide savings to payors, including state-supported charity care, and would enable more efficient utilization of charity care funds by hospitals. According to the New Jersey Hospital Association, collectively, the eight Hudson County hospitals were not reimbursed for over $25 million that had been billed for all charity health care during calendar year 2002 at Medicaid rates.[l] This represented 27% of the $94.6 million billed for charity care at these rates in the State of New Jersey. Because cancer is the second leading cause of death in New Jersey and the county has high rates of both late-stage cancer diagnoses and cancer mortality, cancer care represents a material portion of the amount of charity care costs that Hudson County hospitals are absorbing.[2] Moreover, county residents with cancer who are medically underserved often access the healthcare delivery system for cancer care through the most expensive route: hospital emergency services.

Therefore, a rough and perhaps conservative estimate of the amount of uncompensated cancer care costs that Hudson County hospitals are absorbing is $5 million per year. This figure does not include cancer care provided by Hudson County doctors, which, as stated previously, may amount to $200,000 to $300,000 in lost revenues per year for every oncologist who accepts Medicaid, treats the uninsured, and accepts hardship cases. Taking all these factors into account, it is estimated that the cost of uncompensated cancer care in Hudson County is approximately $10 million per year.

---

[j] NEUPOGEN® is a synthetic drug used to increase neutrophils (white blood cells) in the blood after chemotherapy. Its use may help prevent the occurrence of serious infections.

[k] Hudson County has one of the highest rates of known HIV infection in the state, and AIDS patients who do not have a safe discharge plan also stay in the hospital. Persons who need dialysis pose similar problems for hospitals.

[l] Medicaid rates themselves are perceived by hospitals as underpayment for the services delivered, so this represents an underestimate of the real cost to hospitals.

Lack of a Cancer Care Plan

According to the Hudson County Department of Health and Human Services and key informants throughout the county, Hudson County lacks a comprehensive plan to address cancer in the community. The new public health standards being implemented in New Jersey require each county to prepare community-based assessments in 2007. Implementation of these standards may lead to a comprehensive cancer prevention plan for Hudson County.

Need for a Countywide Cancer Coalition

Sporadic local efforts are underway to provide cancer interventions for a specific community or *population of focus*. Examples of these programs include annual health fairs or outreach programs. Programs reaching populations of focus in Hudson County such as blacks, Hispanics, Filipinos, and a growing Russian community, as well as support groups who try to modify behavior within these communities, require community-based leadership in cooperation with healthcare service providers. Recently, Jersey City Family Health Center reported some success reaching Hispanic men for prostate cancer screenings and Hispanic women for breast cancer screening through local community partnerships.

Two formal cancer coalitions are currently functioning in Hudson County. Each coalition is associated with its respective NJCEED Program, one in Jersey City and the other in Hoboken. In addition, several cancer survivor groups have been organized in such communities as Bayonne and Harrison, as well as in hospitals. Qualitative interviews conducted for this study suggest, however, that a countywide cancer coalition would be a good place to begin addressing cancer problems in Hudson County. A countywide cancer coalition would facilitate dissemination of information about services and providers, as well as provide a forum for professionals, patients, and survivors. Local health officers, as well as community leaders and advocates should be engaged in this process. Local leadership of at-risk and underserved communities should also be identified and engaged in this process. This is especially crucial in Hudson County, which has a large transient community.

The Hudson County Cancer Coalition needs to become a proactive body that advocates for its constituents. Partnerships with state and local governments, the healthcare industry, the large- and middle-market business communities, unions and other membership organizations, the media, the entire education community, faith-based organizations, community action groups, and the general public should be developed.

Section 3 – Cancer Burden

All incidence[20] and mortality[21] rates cited herein are per 100,000 and age-adjusted to the 2000 U.S. population standard[22]. All county and state rates are average annual rates during 1996–2000. For simplicity, the 1996–2000 average annual age-adjusted incidence or mortality rate hereinafter will be abbreviated and referred to as incidence or mortality rate, respectively. The reason the five-year average has been routinely used is that the small number of cases in a single

year leads to statistical variations that are not generally meaningful. For U.S. incidence rates, 1999 or 2000 rates were used. Unless otherwise specified, all rates are for invasive cancer only.

Overall Cancer Burden

Hudson County's cancer incidence rates are generally lower than the state rates, whereas the county's cancer mortality rates are generally similar to or slightly higher than those of the state. For example, for the period from 1996 through 2000:

- *For all males*, the county's total cancer incidence rate (602.7 per 100,000) was 4.1% ***lower*** than the state rate (628.7), and the county's total cancer mortality rate (273.1 per 100,000) was 4.6% ***higher*** than that of the state (261.1).
- *For white males*, the county's total cancer incidence rate (597.8 per 100,000) was 4.4% ***lower*** than the state rate (625.2), and the county's total cancer mortality rate (275.9 per 100,000) was 7.6% ***higher*** than that of the state (256.5).
- *For Hispanic males*, the county's total cancer incidence rate (462.0 per 100,000) was 14.3% ***lower*** than the state rate (539.1), and the county's total cancer mortality rate (152.6 per 100,000) was 1.7% ***higher*** than that of the state (150.0).[m]
- *For Hispanic females*, the county's total cancer incidence rate (314.5 per 100,000) was 13.6% ***lower*** than the state rate (363.8), and the county's total cancer mortality rate (97.6 100,000) was 5.4% ***higher*** than that of the state (92.6).

Data collected for this report paint a disturbing picture concerning Hudson County's overall cancer burden.[2] From 1996 through 2000, an average of 1,149 cancer deaths per year were reported for Hudson County, split almost evenly between females (573 per year) and males (576 per year). White males accounted for 488 of the county's 576 average annual cancer deaths (85% of cancer deaths among males). The county's cervical, prostate, male colorectal, male lung, and male oral/oropharyngeal cancer mortality rates were all higher than the corresponding rates for New Jersey and the United States. Importantly, the mortality rate among black males in Hudson County was higher than the rate among white males, as in the state overall. During the period 1996–2000, and for most years during this period, the county's cancer incidence rate among black males was higher than in any other group for which statistics were available.

The following table presents the county's cancer incidence and mortality rates by gender along with rough prevalence estimates for each of the seven NJ-CCCP priority cancers.

[m] Hispanics and non-Hispanics may be of any race. Racial categories include both Hispanics and non-Hispanics. Data on non-Hispanics are not available. Comparisons of Hispanic rates with rates for the whole population may underestimate the difference between Hispanics and non-Hispanics because Hispanics are included in the total population.

Summary Table of Selected[a] Age-Adjusted[b] Hudson County Cancer Statistics, 1996-2000[c]

	Estimated Prevalence[d]	Incidence per 100,000[e]	Mortality per 100,000[e]
All Cancers,[f] Hudson County			
Male	7,509	602.7	273.1
Female	11,861	425.4	176.6
NJ-CCCP Priority Cancer by Gender			
Breast, female	4,259	121.2	31.2
Cervical, female	702	***13.4***	***4.2***
Colorectal, male	937	78.8	31.7
Colorectal, female	1,376	54.2	20.9
Lung, male	299	95.4	81.3
Lung, female	340	48.8	36.0
Melanoma, male	269	11.4	3.1
Melanoma, female	317	6.0	1.1
Oral/Oropharyngeal, male	277	***17.9***	***5.8***
Oral/Oropharyngeal, female	186	6.9	1.7
Prostate, male	2,855	178.7	34.1

[a] Based upon the NJ-CCCP.
[b] Age-adjusted to 2000 U.S. Census population standards. Age-adjustment is used to describe rates in which statistical procedures have been applied to remove the effect of differences in composition (specifically, variations in age distribution) of the various populations. This is important in order to portray an accurate picture of the burden of cancer, since cancer is known to disproportionately affect persons of differing ages.
[c] Rates are average annual rates during the time period 1996 through 2000.
[d] Prevalence is the measurement of burden of disease in the population at a particular point in time. Within this report, it represents the number of people alive who have ever been diagnosed with the disease. Prevalence figures given here are rough theoretical estimates, based on a number of assumptions, and computed by applying national prevalence-to-incidence ratios to Hudson County's average annual crude incidence counts for the five years 1996–2000, separately for each gender. Actual prevalence is likely to be of the same order of magnitude as the estimate.[23]
[e] Incidence and mortality are gender-specific, age-adjusted annual rates, not counts. A rate at least 10% higher than the corresponding state rate is shown in bold italics.
[f] "All cancers" represents the sum of all invasive cancer during the time period, not just the seven cancers discussed in detail below.

Cancer Burden by Site

Breast Cancer

For the period 1996–2000, a total of 1,863 new breast cancer cases among females were reported in Hudson County, resulting in an incidence rate of 121.2 per 100,000. This rate was 12% lower than the rate for New Jersey for the same period (138.5 per 100,000). Despite this lower breast cancer incidence rate, the breast cancer mortality rate in Hudson County (31.2 per 100,000) was essentially the same as in New Jersey (31.3 per 100,000), both of which were 15% higher than the U.S. rate (27.2 per 100,000). This pattern also holds for Hispanic females in Hudson County. The breast cancer incidence rate among Hispanic females was lower in the county (89.2 per 100,000) than in the state (103.3). During the period 1996–2000, an average of 99 Hudson

County female residents died of breast cancer each year; 19% of those who died were Hispanic. This percentage is lower than expected based on the ethnic distribution within Hudson County (Hispanics make up 40% of the total population). However, among all Hispanic females in New Jersey who died of breast cancer during this period, 36% were from Hudson County (93 out of 255 Hispanic females). The mortality rate among Hispanic females in Hudson County (21.0 per 100,000) was higher than the statewide rate among Hispanic females (15.9).

From 1996 through 2000, the total percentage of breast cancers diagnosed at a late stage[n] among Hudson County females (33%) was 4.3 percentage points higher than the corresponding percentage for the state as a whole (28.7%). The percentages of late-stage breast cancer diagnosis among white and black females were also higher in Hudson County than in the state: 6.6 percentage points higher among blacks; and 3.5 percentage points higher among whites.[o] Also, as females advance in age in Hudson County, they are also more likely to have breast cancer diagnosed in the later stages than the statewide female population. Among 3,923 New Jersey women aged 50 and over who were interviewed from 2000 through 2002, 78% reported having had a mammogram within the past two years.[24,25] Based on interviews of 187 women in Hudson County during the same period, the county rate did not differ significantly from the state rate.[25] Within the county, the screening rate increased significantly during the period 1992–2002, as it did in the state overall. However, during this period, the percentage of Hudson County women who reported having had a mammogram within the past two years was lower than the percentage of New Jersey women.[p,25]

These data suggest that the population of focus in Hudson County for outreach, education, early detection, and early treatment of breast cancer is all women aged 40 and over, with special emphasis on Hispanic women due to higher mortality and black women and older women due to the higher percentage of late-stage diagnosis of breast cancer, compared to the state.

Cervical Cancer

A total of 207 new cervical cancer cases were reported in Hudson County during the period 1996–2000, resulting in an incidence rate of 13.4 per 100,000. This rate was 23% higher than the New Jersey cervical cancer incidence rate of 10.9 per 100,000. The Hudson County cervical cancer mortality rate was 4.2 per 100,000, which was higher than both the state rate (3.0) and the rate for the United States (3.1). Cervical cancer is a preventable disease and yet an average of 13 Hudson County women died per year from the disease during the period 1996–2000. Moreover, Hudson County's percentage of late-stage cervical cancer diagnosis for black women was 9.4 percentage points higher than the corresponding rate for black women statewide, although this difference was not statistically significant. Despite the low number of cases (20 out of 37 cases), the high percentage of late-stage cervical diagnoses among black women suggests that outreach

[n] Distant plus regional stages.
[o] The percentage of late-stage breast cancer diagnosis among black women was 42.6% in Hudson County and 36.0% in New Jersey, and among white women, 31.4% in Hudson County and 27.9% in New Jersey.
[p] During the period 1992–2002, 64.6% of Hudson County women aged 50 and over indicated that they had had a mammogram within the previous two years (95% CI: 57.6–71.0%), compared to 74.2% of New Jersey women aged 50 and over (95% CI: 72.9–75.5%).[25]

and education efforts to improve the early detection and treatment of cervical cancer among black women in Hudson County should continue.

Hispanic women in Hudson County accounted for a total of 69 cervical cancer diagnoses, which represents 20% of the 337 total cervical cancer cases among Hispanic women in New Jersey during 1996–2000. However, the Hispanic population in Hudson County is increasing dramatically. From 1990 to 2000, the county's total Hispanic population increased by 33% (nearly 60,000 residents) to 242,123, representing 40% of the county's total population: Hudson County has the highest percentage Hispanic population of any county in New Jersey.[3,q] The growing Hispanic population in Hudson County may lead to an increase in the number of cervical cancers being diagnosed in this population in future years. Therefore, all Hispanic women in Hudson County are a population of focus for education concerning the signs and risks of cervical cancer, and all adult and adolescent segments of this population are a population of focus for outreach and cervical cancer screening.

Across the state, 39% of cervical cancer cases were diagnosed in the regional and distant stages, similar to the percentage of cases in Hudson County (38%). Among older age groups, particularly among those aged 50 and older, the percentage of late-stage diagnosis increases. This is also true in Hudson County, where the percentage of late-stage diagnosis was 45% among those aged 50 to 64 years (21 out of 47 cases), and 54% among those aged 65 to 74 years (14 out of 26 cases).

Cervical cancer is a highly preventable and curable disease if detected early with the Papanicolaou ("Pap") test, introduced in the 1940s. Pap tests, which detect some precancerous as well cancerous lesions, are covered by most private and public health insurance. Some companies have moved to cover a more sensitive and specific screening test, the AutoPap, which uses a thin preparation of cells along with computer-assisted technology.[1] Among 7,689 New Jersey women with no history of hysterectomy who were interviewed from 2000 through 2002, 83% reported having had a Pap smear within the past three years.[24,25] Based on interviews of 601 women in Hudson County during this same time period, the county rate did not differ significantly from the state rate.[25] Within the county, the screening rate increased significantly during the period 1992–2002, as it did in the state overall. However, during this period, the percentage of Hudson County women who reported having had a Pap smear within the past three years was lower than the percentage of New Jersey women.[r,25]

Human papillomavirus (HPV), a sexually transmitted disease, is the most significant risk factor for developing cervical cancer; recommendations for the incorporation of HPV testing[s] as part of a pelvic examination have been developed by the American College of Obstetricians and Gynecologists.[1,26]

[q] Statewide, the Hispanic population represents 13% of the total population.
[r] During the period 1992–2002, 76.8% of Hudson County women reported that they had had a Pap smear within the previous three years (95% CI: 73.4–79.9%), compared to 81.7% of New Jersey women (95% CI: 80.8–82.5%).[25]
[s] For example, the ViraPap™ will detect which strains of HPV DNA, if any, are present.

The high percentages of late-stage diagnosis in all women, as well as in older age groups, indicate that outreach and education efforts to increase screening for the early detection and treatment of cervical cancer is needed for all county women aged 50 years and older.

Colorectal Cancer

During the period from 1996 through 2000, a total of 861 new colorectal cancer cases among males and 884 new cases among females were reported in Hudson County. The average annual incidence rate of colorectal cancer among males in Hudson County for this five-year period (78.8 per 100,000) was essentially the same as the New Jersey rate for the same period (79.0 per 100,000), but was higher than the U.S. rate (66.4 per 100,000). Data on racial distribution of the disease revealed that black males in Hudson County had the highest incidence rate of the disease of any race for whom separate data were collected in the county (88.3 per 100,000), a figure that was 15% higher than the incidence rate among black males statewide. Within the county, black males (59%) were more frequently diagnosed in the later stages of disease than their white (50%) counterparts.

The colorectal cancer incidence rate for all females in the county (54.2 per 100,000) was also similar to that of the state (54.4), and higher than the U.S. rate (48.5). In Hudson County, 20% of cases (23 out of 115) among black females were diagnosed at the distant stage of the disease, compared to 12% of cases (98 out of 832) among white females. Mortality rates were also higher for black females in Hudson County (31.2 per 100,000, based on only 11 deaths per year), compared to white females (20.0) in the county and black females statewide (24.6).

In Hudson County, 67% of new male cases of colorectal cancer occurred among males aged 65 and older, and 76% of new female cases occurred among females aged 65 and over.

During the period from 1996 through 2000, an average of 136 Hudson County residents died per year from colorectal cancer. Forty-nine percent of these cases were male, and 51% were female; 84% were white and 14% were black; 17% were Hispanic (of any race). The colorectal cancer mortality rate for all males was higher in Hudson County (31.7 per 100,000) than in New Jersey (19.5) and in the U.S. (25.8). Although there were few deaths (41) among black males in Hudson County due to colorectal cancer, the death rate for this group (34.7 per 100,000) was slightly higher than that for white males (32.3). The colorectal cancer death rate among Hispanic males in the county was 21.6 per 100,000 (based on 64 deaths). The colorectal cancer mortality rate among females in the county (20.9 per 100,000) was similar to the state rate (20.1). Both rates were slightly higher than the U.S. rate (18.0).

Among 4,961 New Jersey adults aged 50 and over who were interviewed from 2001 through 2002, 56% reported having had colorectal cancer screening (either a fecal occult blood test within the past year or a sigmoidoscopy or colonoscopy ever).[24,25] Based on interviews of 292 adults in Hudson County during the same period, screening levels in the county were significantly lower than in the state overall.[t] During the period 1992–2002, screening levels

[t] During the period 2001–2002, 37.4% of Hudson County adults reported having had colorectal cancer screening (95% CI: 28.2–47.5%), compared to 56.1% of New Jersey adults (95% CI: 53.8–58.4%). During the period 1992–

increased significantly in New Jersey; however, screening levels in Hudson County did not increase during this period and were significantly lower than in the state overall.[25]

Based on the aforementioned data, the populations of focus in Hudson County for outreach, education, early detection and early treatment of colorectal cancer are males aged 50 and above, especially males aged 65 to 74, females 65 and over, and black males and females in these age brackets.

Lung Cancer

During the period from 1996 through 2000, a total of 1,055 new cases of lung cancer among males and 776 new cases among females were reported in Hudson County. The average annual incidence rate of lung cancer among males in Hudson County for the five-year period (95.4 per 100,000) was similar to the New Jersey rate for the same period (92.5). However, the lung cancer incidence rate for white males in the county (96.9 per 100,000) was higher than the corresponding state (91.0) and national (87.8) rates. Among Hispanic males, the lung cancer incidence rate in the county (50.0) was lower than the state rate (67.2). Black males had the highest lung cancer incidence rate in the county (105.0 per 100,000), although this rate was lower than the state (118.1) and U.S. (110.7) rates for this population. In Hudson County, black females had a similar incidence rate of lung cancer (51.9 per 100,000) compared to their white counterparts (50.7). Among black females, the county incidence rate (51.9) was equal to the state rate (51.9) and similar to the national rate (50.3).

Lung cancer incidence rates among males were higher than the rates among females in the county across the four older age cohorts (40–49, 50–64, 65–74, and 75+). In females, the county lung cancer incidence rates were similar to (although generally lower than) the state rates. As expected, lung cancer incidence rates were much higher among older males and females, and highest among the 75-and-over cohort. Among females, the state rates exceeded those of the county for those aged 65 to 74 (268.1 vs. 236.2 per 100,000) and aged 75+ (295.1 vs. 252.9 per 100,000).

Hudson County's male and female lung cancer mortality rates were the highest of any cancer within this report (81.3 per 100,000 for males and 36.0 per 100,000 for females). The death rate among males in Hudson County was 9% higher than the statewide rate (74.8). Among females in the county, the mortality rate (36.0) was 20th overall in the state (2nd lowest in the state) and 13% lower than the statewide rate. From 1996 through 2000, an average of 290 Hudson County residents died per year from lung cancer, of which 174 (60%) were male and 116 (40%) were female. The yearly numbers averaged 149 white males, 21 black males, 100 white females, and 14 black females. Thus, the majority of these deaths occurred among the county's white population. Of the lung cancer deaths among Hispanics, 22 were male and 10 were female.

The county's lung cancer mortality rate in black males was 99.8 per 100,000, higher by a wide margin than the rate among white males (82.9), but similar to the rate among black males in New

---

2002, 35.6% of Hudson County adults reported having had colorectal cancer screening (95% CI: 28.7–43.1%), compared to 54.1% of New Jersey adults (95% CI: 52.4–55.8%).[25]

Jersey (100.0) and slightly lower than the rate for black males in the U.S. (107.0). The lung cancer mortality rate among Hispanic males in the county was 35.8.

White females in the county had a lower lung cancer death rate (37.0 per 100,000) than that of the state (42.5) and the U.S. (41.5). Similar to their male counterparts, black females in the county had a slightly higher lung cancer death rate (39.0 per 100,000) than white females. Among Hispanic females, the lung cancer mortality rate in the county (11.6 per 100,000) was slightly higher than in the state overall (10.9), but lower than in the U.S. (15.1).

Hence, the populations of focus for lung cancer in Hudson County are all adult white and black males, given the much higher incidence of the disease in males. Adult black and white females are also at risk and should be a population of focus. The increase in incidence among older age groups of both males and females means that age is a factor and speaks to the long-term effect that smoking has had on disease rates. The goal, therefore, should be to reduce the occurrence of new cases. In addition to adults 18 years and over, the younger population in the county who might begin smoking in their teenage years needs to be particularly targeted for outreach and education regarding lung cancer. Exposure to environmental tobacco smoke (ETS), or "second-hand" smoke, remains an additional important issue.[1]

Melanoma

The melanoma incidence and mortality rate patterns for Hudson County were remarkably different from the other cancers discussed in this report in that the county's melanoma incidence and mortality rates were both considerably lower than the corresponding New Jersey and U.S. rates. From 1996 through 2000, a total of 132 new cases of melanoma among males and 97 new cases among females were reported in Hudson County. The average annual incidence rate of melanoma among males in Hudson County for the five-year period (11.4 per 100,000) was much lower than the corresponding New Jersey rate (20.1 per 100,000) and the U.S. rate (19.0).

Hudson County's melanoma incidence rate among males of all races (11.4 per 100,000) was higher than the rate among females of all races (6.0 per 100,000). The county melanoma incidence rate among females was considerably lower than the corresponding New Jersey rate (11.9 per 100,000) and the U.S. rate (13.4). For both males and females, the county's melanoma incidence rates for all age cohorts were lower than the statewide rates.

During the period from 1996 through 2000, an average of 11 Hudson County residents died per year from melanoma. Nearly all of these deaths occurred among the white population.[u] The county's melanoma mortality rates among males (3.1 per 100,000) and females of all races (1.1 per 100,000) were lower than the New Jersey and the U.S. rates[v] and were among the lowest in New Jersey. The populations of focus in Hudson County for outreach, education, early detection, and early treatment of melanoma cancer are white males and females aged 65 and above.

---

[u] Due to the small number of cases, it is not possible to perform more detailed analyses.

[v] Among males of all races, the mortality rate due to melanoma was 4.4 per 100,000 in New Jersey and 3.9 per 100,000 in the U.S. Among females of all races, the mortality rate due to melanoma was 1.9 per 100,000 in New Jersey and 1.8 per 100,000 in the U.S. rate.

Oral and Oropharyngeal Cancer

During the period from 1996 through 2000, a total of 211 new oral and oropharyngeal cases among males were reported in Hudson County, resulting in an average annual incidence rate for this five-year period of 17.9 per 100,000 for males. This rate was 14% higher than the corresponding state rate (15.7 per 100,000).

For females, there were 107 new cases of oral and oropharyngeal cancer reported in Hudson County during the same period, resulting in an average annual incidence rate for this five-year period of 6.9 per 100,000. This rate was similar to the rate for females in the state (6.4 per 100,000), but much less than the county incidence rate for males.

However, it is of considerable concern that the county's oral and oropharyngeal cancer mortality rate was 5.8 per 100,000 among males, which was higher than the corresponding state rate (4.2). The oral and oropharyngeal cancer mortality rate among females was similar in the county (1.7) and the state (1.6). With regular oral exams, oral and oropharyngeal cancer can be detected early and treated, and yet an average of 19 Hudson County residents died from oral and oropharyngeal cancer each year from 1996 through 2000.

The percentage of cases diagnosed in the regional and distant stages for county males (57%) was similar to the percentage of cases diagnosed statewide (58%). The distribution of cases by stage at diagnosis among females in the county was similar to the pattern observed for the state.

According to the NJ-CCCP, New Jersey males have traditionally had higher incidence rates of oral and oropharyngeal cancer than females, "although in recent years the gap is narrowing due to the increasing number of women who began smoking over the past three decades."[1,27] Among New Jersey males, the oral and oropharyngeal cancer incidence rate among blacks (22.8 per 100,000) was higher than the rate among whites (14.9) during the period 1996–2000, but among females, incidence rates were similar between blacks (6.9) and whites (6.3).[1,20] The five-year relative survival rate for all stages combined is 53%, and 81% for oral/oropharyngeal cancer diagnosed with localized disease.[1,27] Thus, with early detection, survival rates are considerably higher. But from 1996 through 2000, approximately 58% of cases among males and 45% of cases among females in the state were diagnosed in the late stages.[1,20]

The NJ-CCCP suggests that significant gender and race/ethnicity disparities for oral and oropharyngeal cancer exist in New Jersey. This pattern holds especially for black males, as the oral and oropharyngeal mortality rate during the period 1996–2000 for this group was more than double that for white males.[1] According to Behavioral Risk Factor Surveillance System (BRFSS) data from 1999, among New Jersey residents who responded that they had not visited a dentist within the past year, there was a higher proportion among black residents (30%) than white residents (24%), although the highest proportion of residents[w] who responded that they had not visited a dentist within the past year occurred among Hispanics (41%).[1] Furthermore, not all dental visits routinely include screening for oral cancer, so it is likely that screening reaches even fewer persons.[x] Access to appropriate dental services is a particular obstacle in Hudson County.

[w] For whom separate data were available.
[x] National surveys of patients and dentists identify different percentages of screening at dental visits.

For example, it has been reported that the Jersey City Medical Center recently downsized its dental clinic due changes in its oral surgery residency program. As a result, the waiting list and wait times for appointments at this clinic have increased. Obstacles to screening for oral and oropharyngeal cancer in the county need to be addressed.

Prostate Cancer

During the period from 1996 through 2000, an average of 63 deaths per year occurred due to prostate cancer in Hudson County. Of these deaths, 51 were among white males and 11 were among black males. By ethnicity, 11 deaths per year were among Hispanic males. The prostate cancer mortality rate among all males in Hudson County was 34.1 per 100,000, which was slightly higher than both the New Jersey rate (32.9) and the U.S. rate (32.9). For white males, the mortality rate was 32.1 per 100,000, a rate that was also higher than both the New Jersey rate (30.4) and the U.S. rate (30.2). For Hispanic males, the mortality rate for prostate cancer was 26.6 per 100,000 (based on an average of 11 deaths per year), which was higher than both the New Jersey rate (22.1) and the U.S. rate (24.1).

Among black males, the prostate cancer mortality rate in the county (77.1 per 100,000) was higher than both the New Jersey rate (68.9) and the U.S. rate (73.0), and more than double the county mortality rate for white males (32.0). In Hudson County, black males also had an incidence rate of prostate cancer (288.3 per 100,000) that was 70% higher than the rate for white males (169.9), similar to the pattern seen in New Jersey.

The oldest age groups had the highest prostate cancer incidence rates in Hudson County and in the state from 1996 through 2000. The county prostate cancer incidence rates were lower than New Jersey rates in all but the 75-and-over age cohort. Prostate cancer incidence rates in the 75-and-over age cohort were 1,190.7 per 100,000 males, compared to 1,106.2 per 100,000 males in New Jersey. The Hudson County male population aged 65–74 also had a relatively high incidence rate (990.4 per 100,000), although this rate was lower than that reported for the state (1,115.3). In addition, late-stage diagnosis of prostate cancer was more common among county residents aged 40–49 (15% compared to 11% of those aged 50–64 and 8.1% of those aged 65–74); 9.9% of those aged 75 and over were diagnosed in the regional/distant stage.

Therefore, the age group 40 and over in Hudson County – in particular those aged 75 and over – should be the focus of education about risk factors, screening, and early detection of prostate cancer. In addition, black males in Hudson County are a population of focus for prostate cancer, given the high incidence and mortality rates among this population.

These findings suggest that in Hudson County many preventable and treatable cancers are being discovered too late. As a result, all county males and females aged 20 and above should be the focus of increased cancer education and awareness of risk factors. The population of focus for increased screening efforts to improve early detection of cancers is county males and females aged 50 and over. According to the 2000 Census, approximately 220,000 males and 235,000 females constitute this population of focus in Hudson County.[28]

Because age is the single most important risk factor in being diagnosed with cancer, the fact that a large percentage of the county's population is aged 50 years and older suggests that those in that age group should be a population of focus for cancer generally.[2]

In summary, the data presented above suggest the following populations should be the focus of increased screening intervention:

- All county males aged 50 and above for cancer overall, with emphasis on colorectal, lung, oral/oropharyngeal, and prostate cancer.
- Black males aged 50 and over, with an emphasis on colorectal, oral/oropharyngeal, and prostate cancer screening.
- Hispanic males, with special emphasis on prostate cancer screening.
- White females aged 50 and over, with special emphasis on colorectal cancer screening.
- Black females, with special emphasis on early-stage diagnosis of colorectal cancer.
- Hispanic females aged 40 and over for cancer overall.

These populations, as well as all younger populations, should be the focus of educational outreach to increase county residents' understanding of cancer risk factors and signs.

Other Cancer Sites/Issues

HIV/AIDS. In addition to the cancers listed above, people with HIV (the causative agent of AIDS) are at increased risk for several cancers, particularly non-Hodgkin lymphoma and Kaposi's sarcoma.[1] HIV-associated Kaposi's sarcoma is rare except among men who have sex with men. According to the New Jersey Department of Health and Senior Services, Division of HIV/AIDS Services, as of June 2003, Hudson County had the second highest prevalence of known HIV infection[y] in New Jersey (4,122 persons living, known to be HIV positive).[29]

- **Prevalence.** The HIV prevalence rate among males in Hudson County (932.2 per 100,000) was almost double (89% higher than) the corresponding state rate (494.0 per 100,000), and the HIV prevalence rate among females in the county (435.3 per 100,000) was 69% higher than the corresponding state rate (257.5 per 100,000).[z]
- **Race/Ethnicity.** Of those known to be living and infected with HIV, 22% were white, non-Hispanic; 38% were black, non-Hispanic; and 38% were Hispanic.

The number of HIV-associated cancers in the county was not available for this report. Since the majority of persons infected with HIV in Hudson County are heterosexual, national data cannot be readily applied to the county. It would be useful to have each type of HIV-associated cancer tabulated separately by time period to monitor trends and its impact on the community.

---

[y] Includes persons living with AIDS who may not have been tested for HIV. As the total does not include persons living with HIV who have not been tested, the totals include only an unknown portion of total infections.

[z] These prevalence rates were calculated based on prevalence numbers of "living with HIV/AIDS" from the December 31, 2003 New Jersey HIV/AIDS Semi-Annual Report and the total male and female populations in Hudson County and New Jersey from the 2000 Census.[3]

Section 4 – Discussion, Analysis and Recommendations

Recommendations for County and Local Priorities

Hudson County has high rates of poverty, illiteracy, lack of education, lack of health insurance, and lack of English-speaking proficiency. Compounding these problems are large immigrant populations, a fragmented healthcare delivery system, gaps and disparities in this system, and to some extent, transportation problems. According to key informants, transportation is an issue when patients cannot afford to take public transportation, or when several trips to different locations are required due to fragmented care.

According to key informants, the principal cancer problem facing Hudson County is lack of access to cancer screening and oncology services due to poverty, lack of insurance, underinsurance or being undocumented; this problem affects between 34% and 60% of the population of this county. Lack of access to screening and oncology services is a major factor in the county's relatively higher total and site-specific cancer mortality rates in many age, gender, race, and ethnic groups, compared to the corresponding rates for the state.[18]

Based upon the NCI's CIS estimates of the medically underserved population, a large-scale intervention effort will be needed to significantly reduce the relatively high mortality rates and to shift diagnoses to earlier stages in Hudson County. As noted by key informants, it is more cost-efficient to put money into prevention than into specialty care. Thus, given the limited financial resources in the county, prevention needs to be the focus of efforts.

Local Priority 1 – Improve access for low-income and minority individuals (AC-1, AC-1.2.2, AC-2, AC-2.1.7, AC-4, AC-4.1.2, AC-4.1, AC-4.2 and AD-3).[aa]

Local Priority 2 – Promote early detection and reduce cancer mortality (AC-1, AC-1.2.4, AC-2, AC-2.5, AC-2.1, AC-4, AD-1, AD-2, AD-3).

Local Priority 3 – Advance awareness of cancer prevention (NP-1, AC-2, AC-2.1.4, AC-2.1.6, AC-4).

Strategy for addressing these priorities. Design and implement a large-scale, culturally sensitive outreach program to educate and motivate the county's medically underserved population, as well as all other county residents and populations of focus to adopt healthier life styles and, when appropriate, to obtain cancer screening services. One informant advised that this program be called a cancer prevention program, not a cancer program.

We recommend that the resources needed to execute this new, expanded Hudson County Cancer Prevention Program, including the resources necessary to follow up on the increased volume of cancerous and precancerous conditions that will be reported by this new program be marshaled.

[aa] In parentheses are references to relevant goals (e.g., BR-1), objectives (e.g., BR-1.1), or strategies (e.g., BR-1.1.1) outlined in the NJ-CCCP.

Recommended strategies:

- In the near term, utilize the extension of the County Capacity and Needs Assessment through December 2004 to build the foundation for this new Cancer Prevention Program in Hudson County. After December 2004, secure and utilize grant funds from the Office of Cancer Control and Prevention for this expanded outreach and screening program.
- Recruit members who are willing and able to address the cancer problems in Hudson County creatively and effectively for a first-rate, countywide, culturally sensitive, and proactive Cancer Coalition. This coalition will act as the cancer prevention task force for the county.
- Appoint a Coalition Chairman, set up committees, develop a plan based on the Hudson County Capacity and Needs Assessment[2] and other information, and design the outreach program.
- Organize a network of existing ambulatory clinics and private physicians into a coordinated cancer prevention network that will execute this expanded cancer screening program.
- Implement an outreach program and use it to increase the county's current screening rates for all county residents and most especially for those in the medically underserved population. Coordinate the care for those diagnosed with cancer or precancerous conditions.

Network of clinics and private oncology doctors. The network of clinics upon which the new Hudson County Cancer Prevention Program will be built includes, but is not limited to: the Oncology Clinic at Bayonne Hospital; the Center for Family Health of St. Mary Hospital (a large primary care clinic in Hoboken); the Palisades Hospital Breast Center; the county's three large FQHCs – North Hudson Community Action, Horizon Health Center, and Jersey City Family Health Center; and Hoboken Family Planning with clinics in Hoboken, Union City, and West New York. Two of these agencies, Hoboken Family Planning and Jersey City Family Health Center, are already NJCEED grantees. The three FQHCs and the Family Planning Agency receive grant funds from and operate under standards set forth by the Bureau of Primary Health Care of the Health Resources and Services Administration, and they are designed and mandated to break down financial and cultural barriers that prevent the medically underserved from receiving diagnosis and treatment.

Together these seven agencies operate 15 clinics in the county, and they have made significant, long-term, culturally sensitive investments to develop trust in their respective communities and among the populations they serve. They "look like" and "talk like" the people they serve. This is especially important in Hudson County, where the total population is approximately 40% Hispanic; where the Hispanic, Asian, Indian, Filipino, Eastern European, and Russian populations are growing rapidly; and where a large undocumented population exists.

Concerning financial barriers, the FQHCs have a significant financial advantage over other ambulatory settings because Medicaid is required to reimburse them at full cost for the primary (cancer) care services they provide. At other ambulatory settings, Medicaid's fee schedule payments for primary (cancer) care services are significantly less than full cost. Thus, the actual

cost of these services must be subsidized from some other source such as public grants or private foundations.

Regarding private doctors who should be in this cancer network, this needs assessment identified several physicians who should participate in this network, and some of them have served as key informants for this study.[2] These physicians should be encouraged to participate in the coalition and the provider network.

Costs of an expanded outreach and screening program. The Hoboken Family Planning NJCEED Program in Hoboken subcontracted cancer screening at the following unit costs:

- $262 for a primary gynecology service visit, which included the cost of a comprehensive gynecological exam; breast, cervical, and colorectal cancer screening; and the related lab tests.
- $110 for a male prostate and colorectal screening visit, which included the cost of the exam, the related prostate-specific antigen (PSA) test, and other lab tests.

New Jersey residents aged 40 to 64 years who are uninsured or underinsured and have incomes below 250% of the federal poverty level are eligible to receive breast (females only), cervical, colorectal, and prostate cancer screening through the NJCEED Program. Current program funding (both federal and state) limits screening to 18% of this eligible population in need of breast and cervical cancer screening.[bb] This leaves a significant portion (approximately 82%) of the eligible population at risk of not receiving screening. In order to estimate the additional funding needed to cover or reduce this gap, it is necessary to know the number of persons eligible. Because this information is not available, the size of this at-risk population can only be estimated. Based on the best information available, it is estimated that the at-risk population includes approximately 13,847 males and 15,005 females, or 28,852 persons total.[cc] Therefore, a very large number of county residents aged 40 to 64 years are at risk of being diagnosed with late-stage cancer because they do not have health insurance.

This calculation is based on the assumption that the percent uninsured among the county's population aged 40 to 64 years is the same as the percent uninsured among the county's total population (21%). From 1999 to 2002, the statewide percentages of uninsured for all residents aged 35 to 64 years ranged from 10 to 16%.[15] However, based on the demographic information presented in Section 1 (i.e., higher poverty, percent uninsured among Hispanic and total county population), using 21% as an estimate of the percent uninsured in Hudson County for those aged 40 to 64 years with incomes less than 250% of the federal poverty level is considered reasonable

[bb] State NJCEED Program officials confirmed this estimate of 18% for breast and cervical cancer screening and stated that in all probability it is a little high for Hudson County and that 17% was probably a better figure. There is no federal funding for colorectal and prostate cancer screening, so the total funding available for screening for these cancers is even less.

[cc] The county's population aged 40 to 64 years consisted of 80,410 men and 87,139 women (167,549 persons total).[3] In 2002, the county's uninsured rate was estimated to be 21% and NJCEED Program's screening rate is about 18% of the eligible population.[14] Multiplying the population aged 40 to 64 years (80,410 men and 87,139 women) by the percent uninsured in the county (21%) provides a rough estimate of the population eligible for NJCEED. This estimate (16,886 men and 18,299 women) is multiplied by the 82% to estimate the at-risk population, those eligible but for whom NJCEED funding is not available (13,847 men and 15,005 women).

and possibly conservative. The other assumption upon which the 28,852 calculation is based is that the county's NJCEED screening percentage is the same as that of the state (18%). On the positive side, some county residents who meet the NJCEED eligibility requirements are being screened for cancer by their private doctors, the public health system, when hospitalized, or at health fairs where free screenings are offered. Taking these factors into account, we lowered our estimate of county residents aged 40 to 64 years who are at risk of not receiving cancer screening from 28,852 to 25,000.

Based on this estimate of the number of persons at risk for not receiving screening, and the county's percentages of men and women aged 40 to 64 years (48% male and 52% female),[3] it is estimated that this at-risk population consists of 12,000 men and 13,000 women. Based on the unit costs listed above, screening would cost $1.32 million for men and $3.41 million for women, or $4.73 million total. Assuming that this type of screening effort could take place over a four-year period, the screening cost would be $1.2 million per year. Much of the outreach program could be administered through a community outreach organization in Hudson County such as Hopes, Inc., for an expenditure of $100,000 per year. Therefore, the total cost to screen 25,000 of the at-risk individuals in Hudson County is estimated to be $1.3 million per year for four years, or for $5.2 million in total for the four-year period.

Funding the new Hudson County Cancer Outreach and Screening Program

a) **Shift current state expenditures from hospital care to preventive care.** Over the long term, investing money in this expanded cancer outreach, screening, and early detection program could avoid expensive healthcare costs such as emergency room services and inpatient services, especially ICU services, currently utilized to treat late-stage cancers. This could be accomplished through innovative financial program management at the state level by shifting state dollars currently being spent on costly hospital-based cancer care for the benefit of a small number of people to outpatient screening and outpatient-based care for many individuals.

   Realistically, this type of change cannot happen over night. There would be a transition period, during which both types of expenses would be incurred. Therefore, additional funding would be necessary during this transition period to cover the expenses associated with start-up of this new Hudson County cancer prevention program. It is anticipated that this investment will come from a combination of private and public sources. The paragraph above sets this figure at $5.2 million over a four-year period for outreach and screening of 25,000 at-risk individuals in Hudson County.

b) **Fundraising.** The Hudson County Cancer Prevention Program should eventually be organized into a non-profit corporation that is permitted to engage in fundraising activities for the purpose of securing donations for use in expanding its cancer prevention program to the benefit of Hudson County residents.

c) **Utilize sliding fees for those with ability to pay for services.** The NJCEED Program's income eligibility criterion is income below 250% of the federally defined poverty level. This program currently does not impose fees based on a patient's ability to pay for the services to maximize the number of people screened. But NJCEED's funding is limited, and according to its program directors, the NJCEED program is screening only 18% of the state's eligible population for breast and cervical cancer. Other publicly funded health

programs currently operating in New Jersey, such as community health centers and family planning clinics, impose fees based on a sliding scale. Those with incomes equal to or less than 100% of federal poverty pay nothing for their services, whereas those with incomes in the 250% range pay full cost for the services they receive. Patients with incomes between 100% and 250% of federal poverty pay part of the cost for their services based on a sliding-fee schedule. The imposition of these fees on any patient is governed by an overriding principle that the fees cannot be barriers to receiving the services. Therefore, from time to time, these clinics use discretion in individual circumstances to waive or reduce the fees. This approach to fee collection generates substantial amounts of grant-related income that is used to expand services. To provide additional funds to expand the cancer prevention program, the state should consider employing a sliding-fee scale similar to those that have worked in other public health programs.

Recommendations for State Priorities

State Priority 1 – Address funding limitations that are barriers to prevention and care (AC-4, AC-4.1.6). The need in Hudson County for publicly funded cancer screening services is substantial.[dd] The county's two NJCEED programs have received high marks for the work they are doing in providing breast (female), cervical, colorectal, and prostate cancer screening services to the eligible population. But the NJCEED program's funding limitation leaves a major gap in Hudson County between the need for publicly supported cancer screening services and the financial resources available to provide these services.

Therefore, despite the good work of the Hudson County NJCEED Program, and the availability of these other options for cancer screening, a large number of Hudson County residents who meet the NJCEED eligibility requirements do not receive cancer screening. Taking all these factors into account, it is estimated that approximately 25,000 people are in need of publicly supported cancer screening services in Hudson County. Therefore, an increase in NJCEED funding for Hudson County is State Priority #1.

Strategy. Public advocacy campaign for increased state funding of the NJCEED Program.

Recommendation. The NJCEED Program should increase funding to cover screening for at least 50% of the eligible population. Otherwise, the high rates of late-stage cancer and death will continue in Hudson County and other New Jersey counties with high numbers of medically underserved residents aged 40 years and older.

State Priority 2 – Address Medicaid eligibility issues that are barriers to prevention and care. If the diagnosis is cancer, more low-income, uninsured residents of Hudson County should become eligible for Medicaid automatically regardless of the type of cancer diagnosed or where they were screened and diagnosed. Currently, uninsured legal, New Jersey residents aged 40 to 64 years with incomes less than 250% of the federal poverty level and a cervical or breast cancer

[dd] As stated earlier, Hudson County has over 200,000 residents with income below 200% of the federal poverty level, and it is estimated that 21% of the county's total population (128,079) is uninsured, including an estimated 33% of its Hispanic population (79,900).[14]

diagnosis are eligible for Medicaid, provided they are screened by the NJCEED Program and this program determines the diagnosis. Where they were screened and diagnosed should not matter, an unnecessary limitation of the current program, according to key informants. The lack of presumptive Medicaid eligibility for other cancers, such as colorectal and prostate cancer, should also be assessed.

Strategy. Public advocacy campaign to change Medicaid eligibility requirements and reimbursements when the diagnosis is cancer.

Recommendation. The State of New Jersey needs to expand Medicaid eligibility for cancer patients. Eligibility should be automatic based on the patient's residency, financial status, and diagnosis, rather than the type of cancer, who does the screening, or where it takes place. Assuming this can be done, the Hudson County Cancer Prevention Program, as well as other county programs, will have additional funds for prevention and treatment.

State Priority 3 – Address reimbursement issues that are barriers to prevention and care. Several key informants emphatically stated that the state's inability to pay reasonable reimbursement fees for oncology services needed by uninsured, underinsured, and undocumented individuals is the root cause of the problem of lack of access.

Strategy. Public advocacy campaign to increase Medicaid reimbursements for oncology services and reimbursements when the diagnosis is cancer.

Recommendation. The State of New Jersey needs to increase Medicaid fees for oncology services in order to encourage more physicians – especially oncologists, ENT doctors, and GI specialists – to participate in the Medicaid HMOs that serve Hudson County.

State Priority 4 – Address the use of expensive inpatient cancer care services and related reimbursement issues that are barriers to prevention and care. Payors, including state-supported charity care, should cover cancer care that can be utilized on an outpatient basis as effectively and safely as on an inpatient basis, such as chemotherapy, pain medication, antibiotics, and home healthcare services.

Strategy. Public advocacy campaign to restructure charity care to utilize other lower cost treatment modalities and home care, when appropriate, in order to avoid much higher hospital costs.

Recommendation. Charity care should cover outpatient chemotherapy and some medications, especially pain, NEUPOGEN® injections, and antibiotics***,*** and home care in order to avoid much higher inpatient hospital costs.

Closing Remarks

Despite dramatic advances in detection and treatment, cancer remains the second leading cause of death in New Jersey (surpassed only by heart disease) and in the United States.[2] Cancer has been the leading cause of death among New Jersey adults between the ages of 45 and 64 since 1983. In response to these problems, the Task Force on Cancer Prevention, Early Detection and Treatment in New Jersey published the New Jersey Comprehensive Cancer Control Plan (NJ-CCCP) in July 2002, which has as its basic goal reducing the burden of cancer for all New Jersey residents (NJ-CCCP, p. xviii).

The Cancer Capacity and Needs Assessment provides a detailed baseline assessment for Hudson County. The data, interpretations, and recommendations in this report were developed to provide a wide array of public health and medical personnel with standardized information and detailed analyses that can help guide and focus their efforts at the county level, including such local health initiatives as the forthcoming Community Health Improvement Plans. The reports from all of the counties will collectively inform the continuing comprehensive cancer control efforts of the Office of Cancer Control and Prevention of the New Jersey Department of Health and Senior Services, the Governor's Task Force on Cancer Prevention, Early Detection and Treatment in New Jersey, and the University of Medicine and Dentistry of New Jersey.

References

[1] Task Force on Cancer Prevention, Early Detection and Treatment in New Jersey. New Jersey Comprehensive Cancer Control Plan. Report to the Governor, July 2002. i-xx, 1-287. 2002. Trenton, NJ, New Jersey Department of Health and Senior Services.

[2] Bock R, Bullock W. Draft Hudson County Report, June 2004. In: *New Jersey Statewide County-based Cancer Capacity and Needs Assessment Initiative, 2003-2004*. Editors: Stanley H. Weiss (UMDNJ) and Margaret L. Knight (NJDHSS).

[3] U.S. Census Bureau; Census 2000, Summary File 1 (SF 1) 100-Percent Data, generated using American FactFinder, http://www.factfinder.census.gov.

[4] Hudson County, New Jersey, Directory of County & Municipal Offices & Agencies, Bernard M. Harnett, Jr. County Executive and the Hudson County Board of Freeholders (Winter 2001-02).

[5] Hudson Population Up 10 Percent, Hispanics make up 40% of total [Journal Staff]. The Jersey Journal 2001 Mar 9:1, 4.

[6] Surge of population growth in Hudson County [editorial]. The Jersey Journal 2001 Mar 9;Sect. A:8.

[7] "The Hudson Highlight" Volume XI - Issue I, Justice William Brennan, Court House 583 Newark Avenue Jersey City, NJ 07306.

[8] Morrill, J. Census missed 2.2% of Hudson - Its third worst U.S. undercount. The Jersey Journal 2001 Jul 3: 1.

[9] Associated Press. Hudson wants everyone counted to ensure aid. The Star-Ledger 1999 Feb 2:31.

[10] Morrill, J. Latino numbers shifting Dominicans top Union City growth. The Jersey Journal 2001 Sep 11:1, 12.

[11] Fink, J. Hudson the 'youngest' county in Jersey. The Jersey Journal 2001 May 23:1, 4.

[12] Espinosa, M. Hudson's median pay has slipped. The Jersey Journal 2001 Dec 4:1-3.

[13] Petrick, J. County income up 53% in 90's: Still near bottom of statewide list. The Jersey Journal 2001 Aug 8:1, 4.

[14] New Jersey Primary Care Association. Hudson County Data Report. October 7, 2003.

[15] Center for Health Statistics, New Jersey Department of Health and Senior Services. Health Insurance Coverage in New Jersey, 1999–2002. http://www.nj.gov/health/chs/hic9902/ .

[16] Ritch WA, Benjamin KL. County Profiles I: Demographics of New Jersey Communities. New Brunswick, NJ: UMDNJ-School of Public Health. April 2002. 33.

[17] Weiss SH, Knight ML. Cancer Resource Database of New Jersey (CRDNJ). 2004. Newark, NJ & Trenton, NJ, UMDNJ & NJDHSS.

[18] Committee on the Consequences of Uninsurance, Institute of Medicine, Board on Healthcare Services. Care without coverage: Too little, too late. 2002.

[19] National Cancer Institute. 2001 cluster profile. Unpublished data. Consumer Health Profile maps of each New Jersey county were provided by the NCI's Atlantic Region Cancer Information Service to NJDHSS/UMDNJ and to each County Evaluator. June 2003. (More information can be obtained from 1-800-4-CANCER.)

[20] New Jersey State Cancer Registry, New Jersey Department of Health and Senior Services. Cancer incidence and distribution of stage at diagnosis in New Jersey by county, 1996–2000, for the New Jersey Comprehensive Cancer Control Plan county capacity/needs assessments. Personal communications to SH Weiss. August and September, 2003.

[21] National Cancer Institute and Centers for Disease Control and Prevention. State cancer profiles mortality data. (Continually updated data may be obtained from http://statecancerprofiles.cancer.gov/, a site associated with http://cancercontrolplanet.cancer.gov/ .) Underlying sources of data: Death data provided by the National Vital Statistics System public use data file. Death rates calculated by the National Cancer Institute using SEER*Stat. Death rates are age-adjusted to the 2000 U.S. standard population by 5-year age groups. Population counts for denominators are based on Census populations as modified by NCI. Surveillance, Epidemiology, and End Results (SEER) Program data are explained at www.seer.cancer.gov.

[22] U.S. Census Bureau; Census 2000, http://www.factfinder.census.gov.

[23] Weiss SH, Klotz JB, Rosenblum DM. Estimating prevalence. Unpublished communication. 12/10/2004.

[24] Division of Adult and Community Health, National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention. Behavioral Risk Factor Surveillance System Online Prevalence Data, 1995–2003. http://apps.nccd.cdc.gov/brfss/index.asp.

[25] O'Dowd K. County-level New Jersey BRFSS cancer screening data. Personal communication to SH Weiss. 3/2/2004.

[26] ACOG. Revised cervical cancer screening guidelines require reeducation of women and physicians: All women should have an annual pelvic exam but not all women need annual Pap tests. http://www.acog.org/from_home/publications/press_releases/nr05-04-04-1.cfm?printerFriendly=yes . 5/4/2004.

[27] New Jersey Department of Health and Senior Services. Healthy New Jersey 2010: A health agenda for the first decade of the new millennium. 2001. Trenton, NJ, New Jersey Department of Health and Senior Services.

[28] U.S. Census Bureau; Census 2000, Summary File 2 (SF 2) 100-Percent Data, generated using American FactFinder, http://www.factfinder.census.gov.

[29] Division of HIV/AIDS Services, New Jersey Department of Health and Senior Services. New Jersey HIV/AIDS Semi-annual Newsletter, June 2003, http://www.state.nj.U.S./health/aids/qtr0603.pdf.